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# ENTERED

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**RAW SEQUENCE LISTING**

DATE: 02/20/2003

PATENT APPLICATION: US/09/903,190

TIME: 07:12:58

Input Set : N:\Crif3\RULE60\09903190.RAW.txt

Output Set: N:\CRF4\02202003\I903190.raw

```
1 <110> APPLICANT: Dumas Milne Edwards, Jean-Baptiste
2      Duclert, Aymeric
3      Bougueleret, Lydie
4 <120> TITLE OF INVENTION: Complementary DNAs
5 <130> FILE REFERENCE: GENSET.021A
6 <140> CURRENT APPLICATION NUMBER: US/09/903,190
7 <141> CURRENT FILING DATE: 2001-07-11
8 <150> PRIOR APPLICATION NUMBER: US/09/247,155A
9 <151> PRIOR FILING DATE: 1999-02-09
10 <150> PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/074,121
W--> 11 <151> PRIOR FILING DATE: EARLIER FILING DATE: 1998-02-09
12 <150> PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/081,563
W--> 13 <151> PRIOR FILING DATE: EARLIER FILING DATE: 1998-04-13
14 <150> PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/096,116
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16 <150> PRIOR APPLICATION NUMBER: EARLIER APPLICATION NUMBER: 60/099,273
W--> 17 <151> PRIOR FILING DATE: EARLIER FILING DATE: 1998-10-04
18 <160> NUMBER OF SEQ ID NOS: 182
19 <170> SOFTWARE: Patent.pm
21 <210> SEQ ID NO: 1
22 <211> LENGTH: 47
23 <212> TYPE: RNA
24 <213> ORGANISM: Artificial Sequence
25 <220> FEATURE:
26 <223> OTHER INFORMATION: in vitro transcription product
27 <220> FEATURE:
28 <221> NAME/KEY: modified_base
29 <222> LOCATION: 1
30 <223> OTHER INFORMATION: m7g
31 <400> SEQUENCE: 1
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34 <210> SEQ ID NO: 2
35 <211> LENGTH: 46
36 <212> TYPE: RNA
37 <213> ORGANISM: Artificial Sequence
38 <220> FEATURE:
39 <223> OTHER INFORMATION: in vitro transcription product
40 <400> SEQUENCE: 2
41      gcauccuacu cccauccaau uccacccuaa cuccucccau cuccac      46
43 <210> SEQ ID NO: 3
44 <211> LENGTH: 25
45 <212> TYPE: DNA
46 <213> ORGANISM: Artificial Sequence
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```

47 <220> FEATURE:
48 <223> OTHER INFORMATION: oligonucleotide
49 <400> SEQUENCE: 3
50     atcaagaatt cgcacgagac catta                                25
52 <210> SEQ ID NO: 4
53 <211> LENGTH: 25
54 <212> TYPE: DNA
55 <213> ORGANISM: Artificial Sequence
56 <220> FEATURE:
57 <223> OTHER INFORMATION: oligonucleotide
58 <400> SEQUENCE: 4
59     taatggtctc gtgcgaattc ttgat                                25
61 <210> SEQ ID NO: 5
62 <211> LENGTH: 25
63 <212> TYPE: DNA
64 <213> ORGANISM: Artificial Sequence
65 <220> FEATURE:
66 <223> OTHER INFORMATION: oligonucleotide
67 <400> SEQUENCE: 5
68     ccgacaagac caacgtcaag gccgc                                25
70 <210> SEQ ID NO: 6
71 <211> LENGTH: 25
72 <212> TYPE: DNA
73 <213> ORGANISM: Artificial Sequence
74 <220> FEATURE:
75 <223> OTHER INFORMATION: oligonucleotide
76 <400> SEQUENCE: 6
77     tcaccagcag gcagtggctt aggag                                25
79 <210> SEQ ID NO: 7
80 <211> LENGTH: 25
81 <212> TYPE: DNA
82 <213> ORGANISM: Artificial Sequence
83 <220> FEATURE:
84 <223> OTHER INFORMATION: oligonucleotide
85 <400> SEQUENCE: 7
86     agtgattcct gctactttgg atggc                                25
88 <210> SEQ ID NO: 8
89 <211> LENGTH: 25
90 <212> TYPE: DNA
91 <213> ORGANISM: Artificial Sequence
92 <220> FEATURE:
93 <223> OTHER INFORMATION: oligonucleotide
94 <400> SEQUENCE: 8
95     gcttgggtctt gttctggagt ttaga                                25
97 <210> SEQ ID NO: 9
98 <211> LENGTH: 25
99 <212> TYPE: DNA
100 <213> ORGANISM: Artificial Sequence
101 <220> FEATURE:

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102 <223> OTHER INFORMATION: oligonucleotide
103 <400> SEQUENCE: 9
104      tccagaatc gagacaagcc aattt                25
106 <210> SEQ ID NO: 10
107 <211> LENGTH:
108 <212> TYPE:
109 <213> ORGANISM: Artificial Sequence
110 <220> FEATURE:
111 <223> OTHER INFORMATION: oligonucleotide
112 <400> SEQUENCE: 11
113      aggggac agcgag agtcc                25
115 <210> SEQ ID NO: 11
116 <211> LENGTH: 25
117 <212> TYPE: DNA
118 <213> ORGANISM:
119 <220> FEATURE:
120 <223> OTHER INFORMATION: oligonucleotide
121 <400> SEQUENCE: 11
122      gaaagg aaaagactca ttt                25
124 <210> SEQ ID NO: 12
125 <211> LENGTH:
126 <212> TYPE:
127 <213> ORGANISM: Artificial Sequence
128 <220> FEATURE:
129 <223> OTHER INFORMATION: oligonucleotide
130 <400> SEQUENCE: 12
131      gcaaca atcaggacag g                25
133 <210> SEQ ID NO: 13
134 <211> LENGTH: 25
135 <212> TYPE: DNA
136 <213> ORGANISM: Artificial Sequence
137 <220> FEATURE:
138 <223> OTHER INFORMATION: oligonucleotide
139 <400> SEQUENCE: 13
140      atcgtt cgcacgagac catta                25
142 <210> SEQ ID NO: 14
143 <211> LENGTH: 67
144 <212> TYPE: DNA
145 <213> ORGANISM: Artificial Sequence
146 <220> FEATURE:
147 <223> OTHER INFORMATION: oligonucleotide
148 <220> FEATURE:
149 <221> NAME/KEY: misc_feature
150 <222> LOCATION: 67
151 <223> OTHER INFORMATION: n=a, g, c or t
152 <400> SEQUENCE: 14
153      atcgttgaga ctctgaccag cagagtcacg agagagacta cacggtactg gttttttttt    60
W--> 154      ttttttvn                                67
156 <210> SEQ ID NO: 15

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```

157 <211> LENGTH: 9
158 <212> TYPE: D
159 <213> ORGANISM: Artificial Sequence
160 <220> FEATURE:
161 <223> OTHER INFORMATION: o. pleotide
162 <400> SEQUENCE: 15
163      ccagcagagt cagcagagag actacac
165      <211> LF 25
166 <212> : A
167 <213> : Artificial Sequence
168 <220> : FEATURE:
169 <223> OTHER INFORMATION: oligonucleotide
171 <400> SEQUENCE: 16
172      agagag actacac
173      NO: 17
175 <211>
176 <212> TYPE: DNA
177 <213> ORGANISM: Homo Sapiens
178 <220> FEATURE:
179 <221> NAME/KEY: misc_feature
180 <222> LOCATION: complement(261..376)
181 <223> OTHER INFORMATION: blastn
182 <220> FEATURE:
183 <221> NAME/KEY: misc_feature
184 <222> LOCATION: complement(380..486)
185 <223> OTHER INFORMATION: blastn
186 <220> FEATURE:
187 <221> NAME/KEY: misc_feature
188 <222> LOCATION: complement(110..145)
189 <223> OTHER INFORMATION: blastn
190 <220> FEATURE:
191 <221> NAME/KEY: misc_feature
192 <222> LOCATION: complement(196..229)
193 <223> OTHER INFORMATION: blastn
194 <220> FEATURE:
195 <221> NAME/KEY: sig_peptide
196 <222> LOCATION: 90..140
197 <223> OTHER INFORMATION: Von Heijne matrix
198 <220> FEATURE:
199 <221> NAME/KEY: misc_feature
200 <222> LOCATION: 290
201 <223> OTHER INFORMATION: n=a, g, c or t
202 <400> SEQUENCE: 17
203      aatatrarac agctacaata ttccagggcc artcacttgc catttctcat aacagcgtca
204      gagagaaaga actgactgar acgtttgag atg aag aaa gtt ctc ctc ctg tc
205      Met Lys Lys Val Leu Leu Leu ile
206      -15 -10
207      aca gcc atc ttg gca gtg gct gtw ggt ttc cca gtc tct caa gac cag

```

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```

208      Thr Ala Ile Leu Ala Val Ala Val Gly Phe Pro Val Ser Gln Asp Gln
209              -5                      1                      5
210      gaa cga gaa aaa aga agt atc agt gac agc gat gaa tta gct tca ggr      209
211      Glu Arg Glu Lys Arg Ser Ile Ser Asp Ser Asp Glu Leu Ala Ser Gly
212              10                      15                      20
213      wtt ttt gtg ttc cct tac cca tat cca ttt cgc cca ctt cca cca att      257
W--> 214      Xaa Phe Val Phe Pro Tyr Pro Tyr Pro Phe Arg Pro Leu Pro Pro Ile
215              25                      30                      35
216      cca ttt cca aga ttt cca tgg ttt aga cgt aan ttt cct att cca ata      305
217      Pro Phe Pro Arg Phe Pro Trp Phe Arg Arg Xaa Phe Pro Ile Pro Ile
218      40                      45                      50                      55
219      cct gaa tct gcc cct aca act ccc ctt cct agc gaa aag taaacaaraa      354
220      Pro Glu Ser Ala Pro Thr Thr Pro Leu Pro Ser Glu Lys
221              60                      65
222      ggaaaagtca crataaacct ggtcacctga aattgaaatt gagccacttc cttgaaraat      414
223      caaaattcct gttaataaaa raaaaacaaa tgtaattgaa atagcacaca gcattctcta      474
224      gtcaatatct ttagtgatct tctttaataa acatgaaagc aaaaaaaaaa aa      526
226 <210> SEQ ID NO: 18
227 <211> LENGTH: 17
228 <212> TYPE: PRT
229 <213> ORGANISM: Homo Sapiens
230 <220> FEATURE:
231 <221> NAME/KEY: SIGNAL
232 <222> LOCATION: 1..17
233 <223> OTHER INFORMATION: Von Heijne matrix
234      score 8.2
235      seq LLLITAILAVAVG/FP
236 <400> SEQUENCE: 18
237      Met Lys Lys Val Leu Leu Leu Ile Thr Ala Ile Leu Ala Val Ala Val
238      1                      5                      10                      15
239      Gly
241 <210> SEQ ID NO: 19
242 <211> LENGTH: 822
243 <212> TYPE: DNA
244 <213> ORGANISM: Homo Sapiens
245 <220> FEATURE:
246 <221> NAME/KEY: misc_feature
247 <222> LOCATION: 260..464
248 <223> OTHER INFORMATION: blastn
249 <220> FEATURE:
250 <221> NAME/KEY: misc_feature
251 <222> LOCATION: 118..184
252 <223> OTHER INFORMATION: blastn
253 <220> FEATURE:
254 <221> NAME/KEY: misc_feature
255 <222> LOCATION: 56..113
256 <223> OTHER INFORMATION: blastn
257 <220> FEATURE:
258 <221> NAME/KEY: misc_feature

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**RAW SEQUENCE LISTING ERROR SUMMARY**  
**PATENT APPLICATION: US/09/903,190**DATE: 02/20/2003  
TIME: 07:12:59Input Set : N:\Crf3\RULE60\09903190.RAW.txt  
Output Set: N:\CRF4\02202003\I903190.raw**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:14; N Pos. 67  
Seq#:17; N Pos. 290  
Seq#:17; Xaa Pos. 24,50  
Seq#:19; N Pos. 115  
Seq#:19; Xaa Pos. 31  
Seq#:21; Xaa Pos. 3  
Seq#:23; N Pos. 101  
Seq#:23; Xaa Pos. -2,26,27,35  
Seq#:24; Xaa Pos. 14  
Seq#:25; Xaa Pos. 69,106,118,134,141  
Seq#:27; Xaa Pos. 156,157,170,171  
Seq#:34; N Pos. 335,376  
Seq#:53; N Pos. 1  
Seq#:130; Xaa Pos. -5,42,58  
Seq#:131; Xaa Pos. 49,74,75,88,98,104,112,114,120  
Seq#:133; Xaa Pos. 48  
Seq#:134; Xaa Pos. 27,28,43,44,49,50,52,53  
Seq#:135; Xaa Pos. -65,31,34  
Seq#:136; Xaa Pos. 48,52,55,59,65  
Seq#:138; Xaa Pos. 81,84,87,131,135,143,156  
Seq#:139; Xaa Pos. 32,91,98  
Seq#:141; Xaa Pos. 32,100  
Seq#:142; Xaa Pos. 31,84,88,90,94,100,110,113,117,122,152,153,173,193,194  
Seq#:143; Xaa Pos. 37,43  
Seq#:144; Xaa Pos. 56,70,107,110,113,178,181,183,195,200,202,204,230,231  
Seq#:144; Xaa Pos. 244  
Seq#:146; Xaa Pos. 74  
Seq#:147; Xaa Pos. 4  
Seq#:148; N Pos. 745  
Seq#:148; Xaa Pos. -26,-25,-24  
Seq#:149; N Pos. 482  
Seq#:149; Xaa Pos. 40,41,43,60,70,76,82,86,105,107  
Seq#:150; Xaa Pos. 59,69,78,85,87  
Seq#:151; Xaa Pos. 70,139,141,154,156,165  
Seq#:154; Xaa Pos. 24,25,29,87  
Seq#:155; Xaa Pos. -5,42,58  
Seq#:156; Xaa Pos. 49,74,75,88,98,104,112,114,120  
Seq#:158; Xaa Pos. 48  
Seq#:159; Xaa Pos. 27,28,43,44,49,50,52,53  
Seq#:160; Xaa Pos. -65,31,34  
Seq#:161; Xaa Pos. 48,52,55,59,65  
Seq#:163; Xaa Pos. 81,84,87,131,135,143,156  
Seq#:164; Xaa Pos. 32,91,98  
Seq#:166; Xaa Pos. 32,100

**RAW SEQUENCE LISTING ERROR SUMMARY**

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TIME: 07:12:59

Input Set : N:\Crf3\RULE60\09903190.RAW.txt

Output Set: N:\CRF4\02202003\I903190.raw

Seq#:167; Xaa Pos. 31,84,88,90,94,100,110,113,117,122,152,153,173,193,194  
Seq#:168; Xaa Pos. 37,43  
Seq#:169; Xaa Pos. 56,70,107,110,113,178,181,183,195,200,202,204,230,231  
Seq#:169; Xaa Pos. 244  
Seq#:171; Xaa Pos. 74  
Seq#:172; Xaa Pos. 4  
Seq#:173; Xaa Pos. -26,-25,-24

## VERIFICATION SUMMARY

DATE: 02/20/2003

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TIME: 07:12:59

Input Set : N:\Crf3\RULE60\09903190.RAW.txt

Output Set: N:\CRF4\02202003\I903190.raw

L:11 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD  
L:13 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD  
L:15 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD  
L:17 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD  
L:154 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:60  
L:214 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:257  
M:341 Repeated in SeqNo=17  
L:295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:60  
M:341 Repeated in SeqNo=19  
L:361 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:325  
L:412 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:60  
M:341 Repeated in SeqNo=23  
L:447 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0  
L:478 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:345  
M:341 Repeated in SeqNo=25  
L:552 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:580  
M:341 Repeated in SeqNo=27  
L:909 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:300  
M:341 Repeated in SeqNo=34  
L:1842 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:53 after pos.:0  
L:4994 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:130 after pos.:98  
M:341 Repeated in SeqNo=130  
L:5052 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131 after pos.:298  
M:341 Repeated in SeqNo=131  
L:5166 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:133 after pos.:404  
L:5218 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:134 after pos.:407  
M:341 Repeated in SeqNo=134  
L:5253 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:135 after pos.:49  
M:341 Repeated in SeqNo=135  
L:5315 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:136 after pos.:246  
M:341 Repeated in SeqNo=136  
L:5411 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:138 after pos.:394  
M:341 Repeated in SeqNo=138  
L:5471 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:139 after pos.:254  
M:341 Repeated in SeqNo=139  
L:5588 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:141 after pos.:288  
M:341 Repeated in SeqNo=141  
L:5637 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:142 after pos.:198  
M:341 Repeated in SeqNo=142  
L:5718 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:143 after pos.:341  
L:5771 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:144 after pos.:291  
M:341 Repeated in SeqNo=144  
L:5906 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:146 after pos.:352  
L:5983 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:147 after pos.:316  
L:6022 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:148 after pos.:162  
M:341 Repeated in SeqNo=148  
L:6083 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:149 after pos.:371  
M:341 Repeated in SeqNo=149



**VERIFICATION SUMMARY**

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Input Set : N:\Crf3\RULE60\09903190.RAW.txt

Output Set: N:\CRF4\02202003\I903190.raw

L:6144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:150 after pos.:348  
M:341 Repeated in SeqNo=150  
L:6200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:151 after pos.:349  
M:341 Repeated in SeqNo=151  
L:6420 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:154 after pos.:296  
M:341 Repeated in SeqNo=154